

(CONVENTIONAL)
FIG. 1

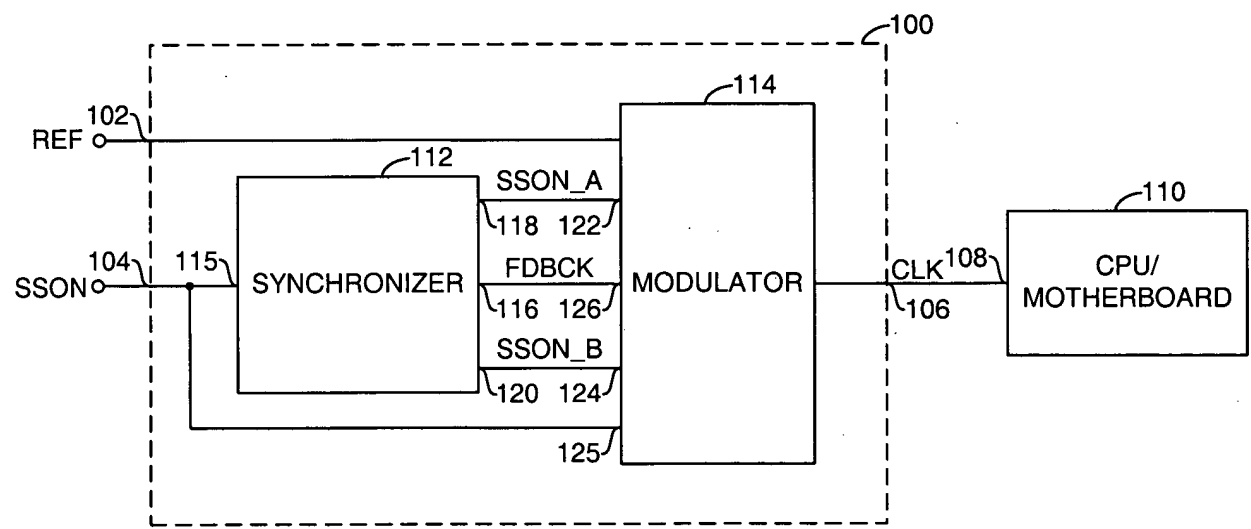
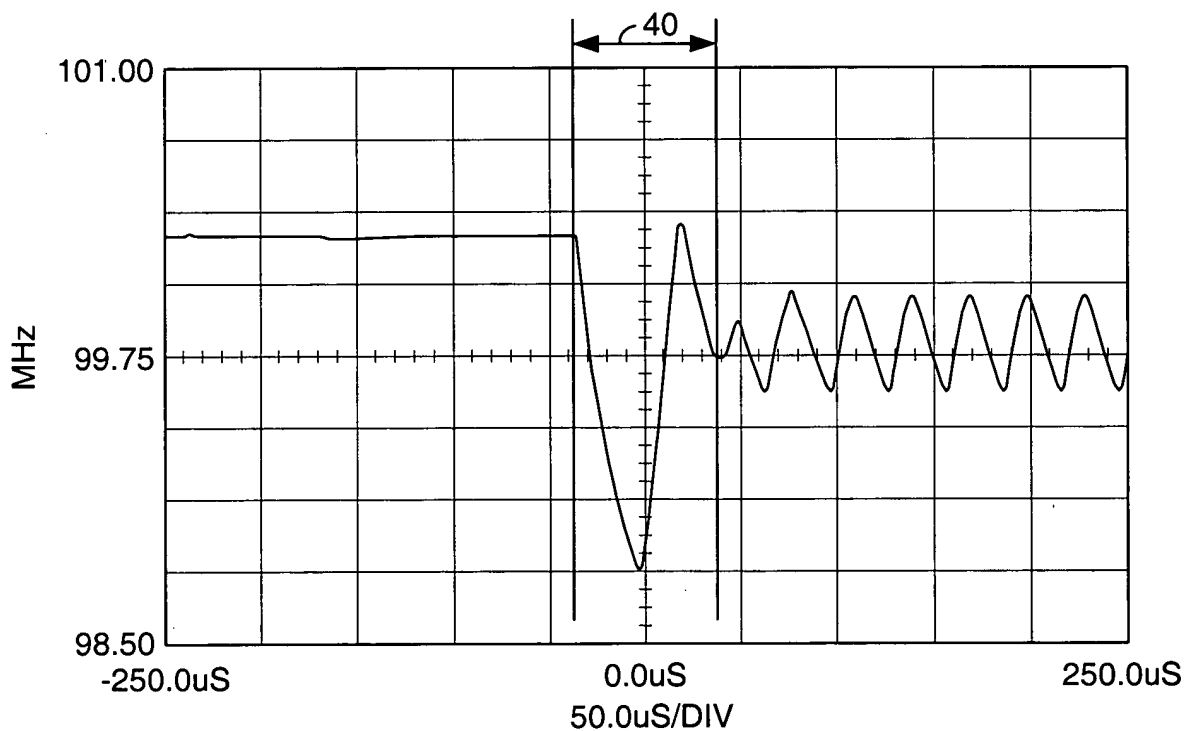
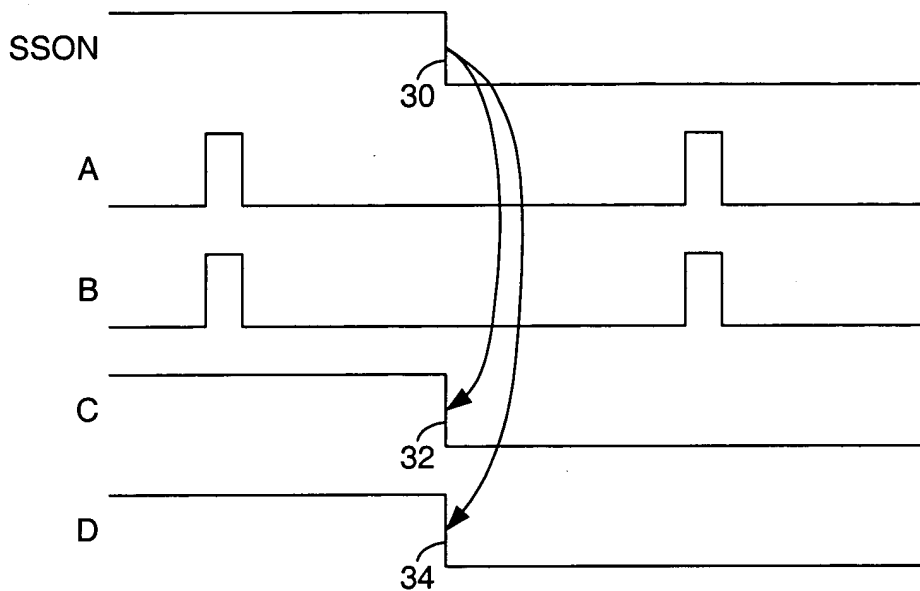


FIG. 3



(CONVENTIONAL)

FIG. 2

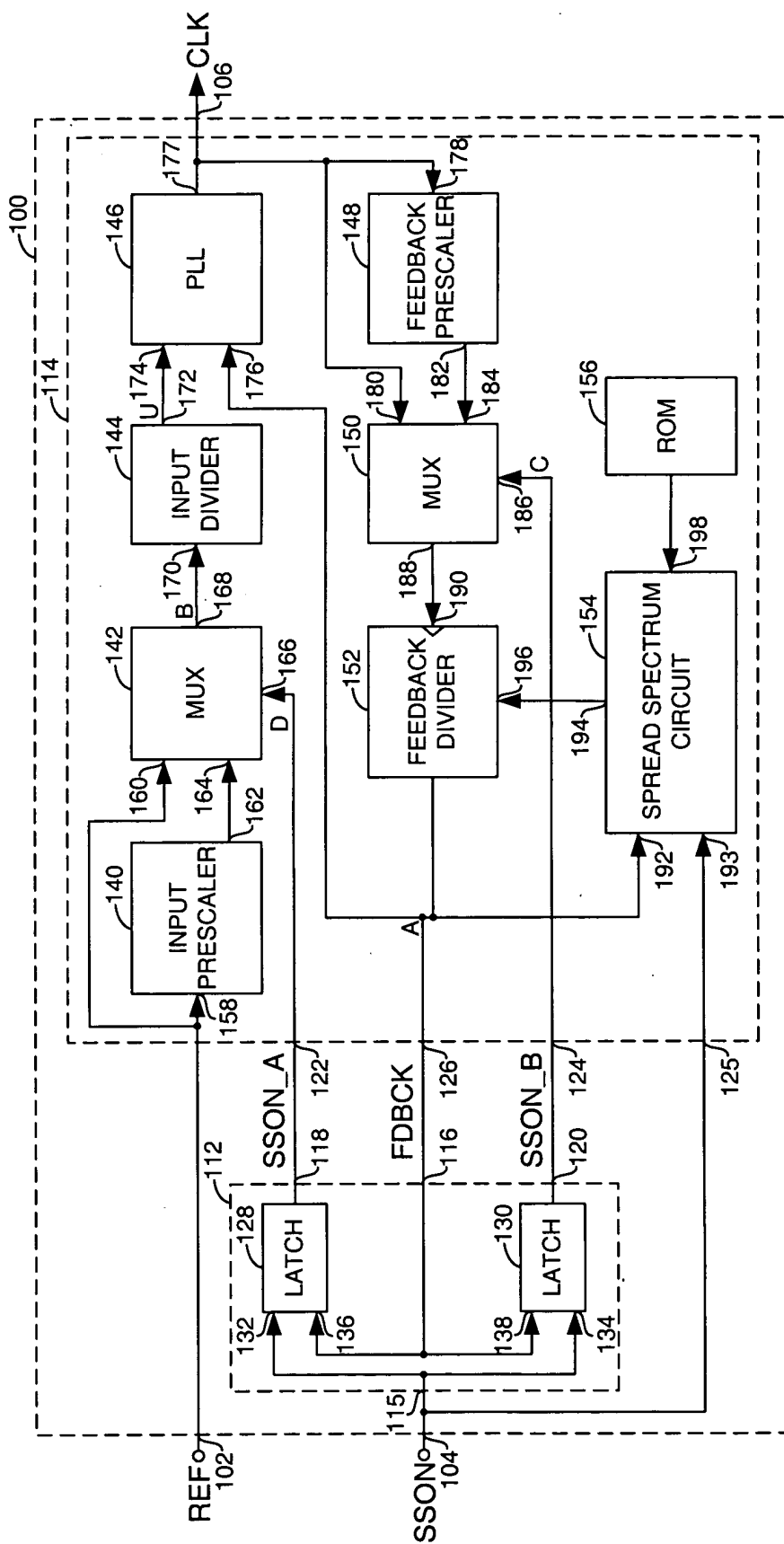
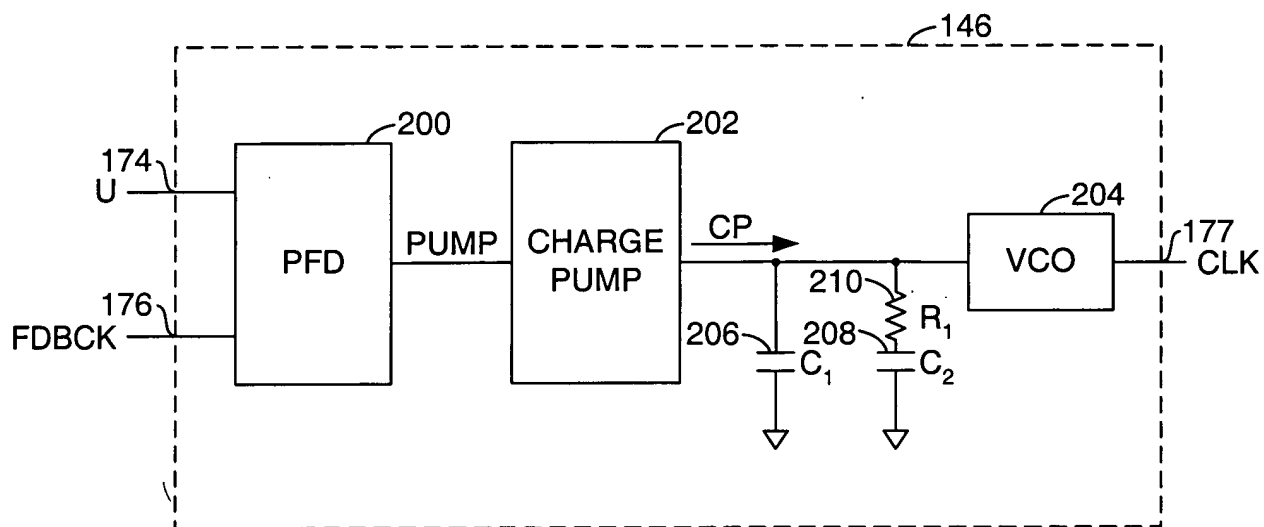
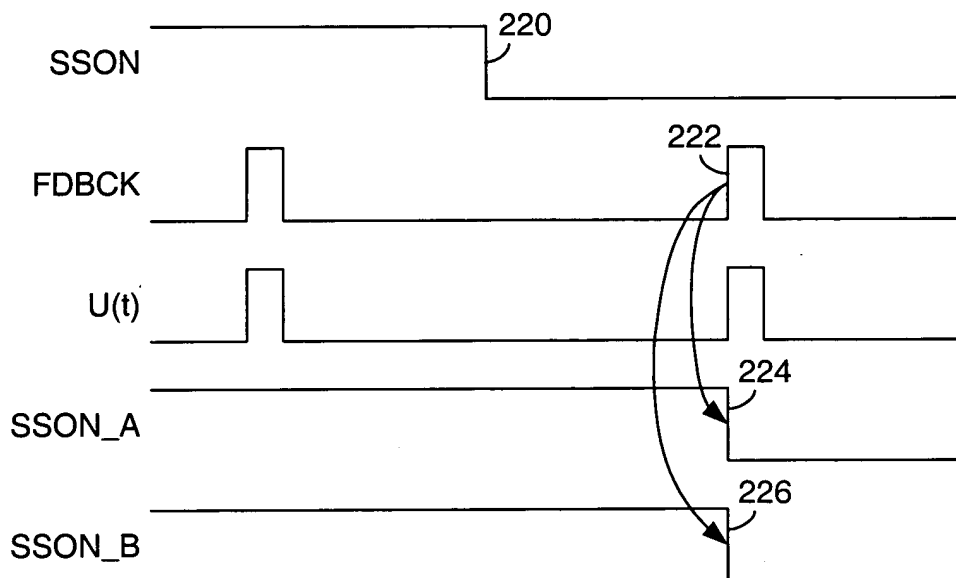
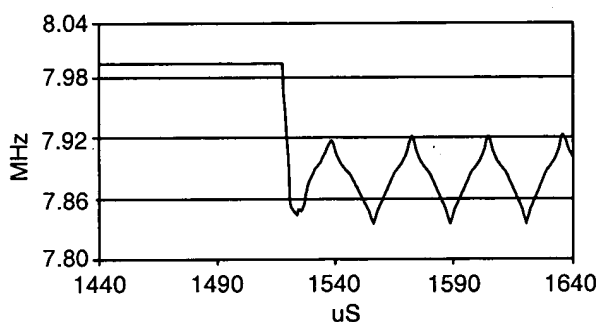


FIG. 4

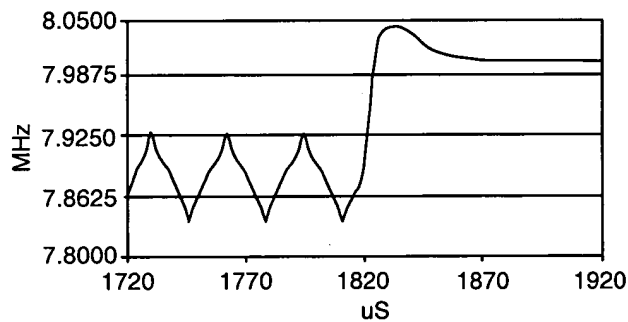
**FIG. 5**



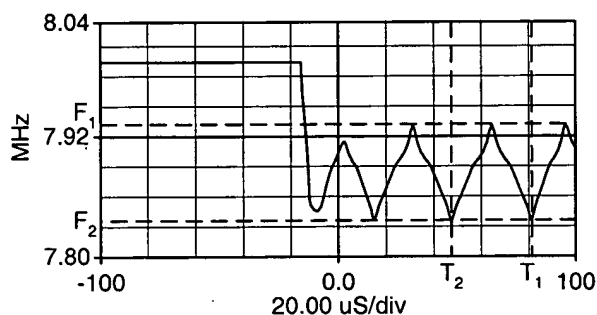
SPREAD SPECTRUM TRANSITION BEHAVIORS ARE CONTROLLED BY THE PROGRAM



(a)

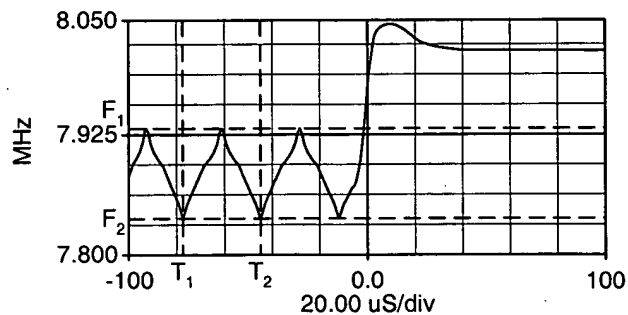


(b)



$T_1 = 49.33\mu\text{S}$ $T_2 = 01.33\mu\text{S}$ $\Delta = 32.00\mu\text{S}$
 $F_1 = 7.93125\text{MHz}$ $F_2 = 7.83750\text{MHz}$ $\Delta = -93.75\text{KHz}$
 MEAN = 7.9401907MHz PK - PK = 173.44KHz

(a)



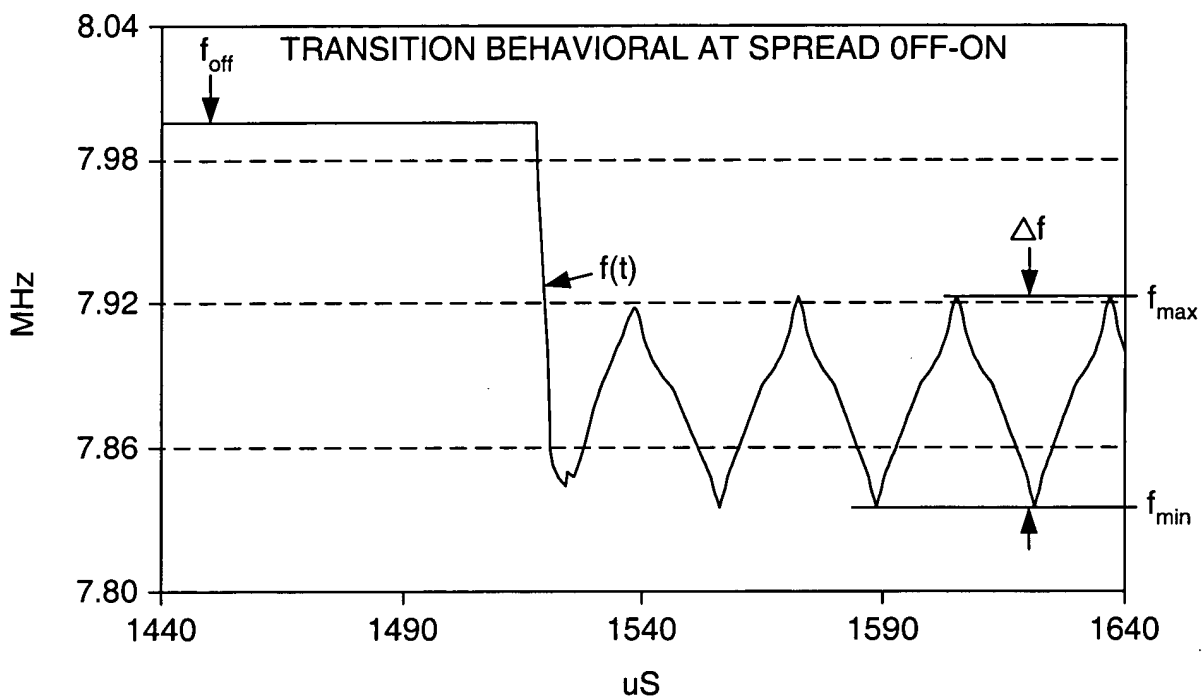
$T_1 = -76.89\mu\text{S}$ $T_2 = -44.89\mu\text{S}$ $\Delta = 32.00\mu\text{S}$
 $F_1 = 7.93125\text{MHz}$ $F_2 = 7.83750\text{MHz}$ $\Delta = -93.75\text{KHz}$
 MEAN = 7.9530444MHz PK - PK = 206.85KHz

(b)

FIG. 6



CRITERIA FOR DETERMINING "GOOD AND BAD" SS TRANSIENT BEHAVIOR



$f(t)$: PLL's RUNNING FREQUENCY IN TRANSIENT PERIOD

f_{off} : PLL's SSCG OFF FREQUENCY

f_{max} : MAXIMUM FREQUENCY IN SSCG ON

f_{min} : MINIMUM FREQUENCY IN SSCG ON

Δf : PEAK TO PEAK FREQUENCY IN SSCG

CRITERIA NEED TO BE SATISFIED:

FREQUENCY RUNNING RANGE DURING TRANSIENT $f_{\text{min}} \leq f(t) \leq f_{\text{off}}$

FIG. 7

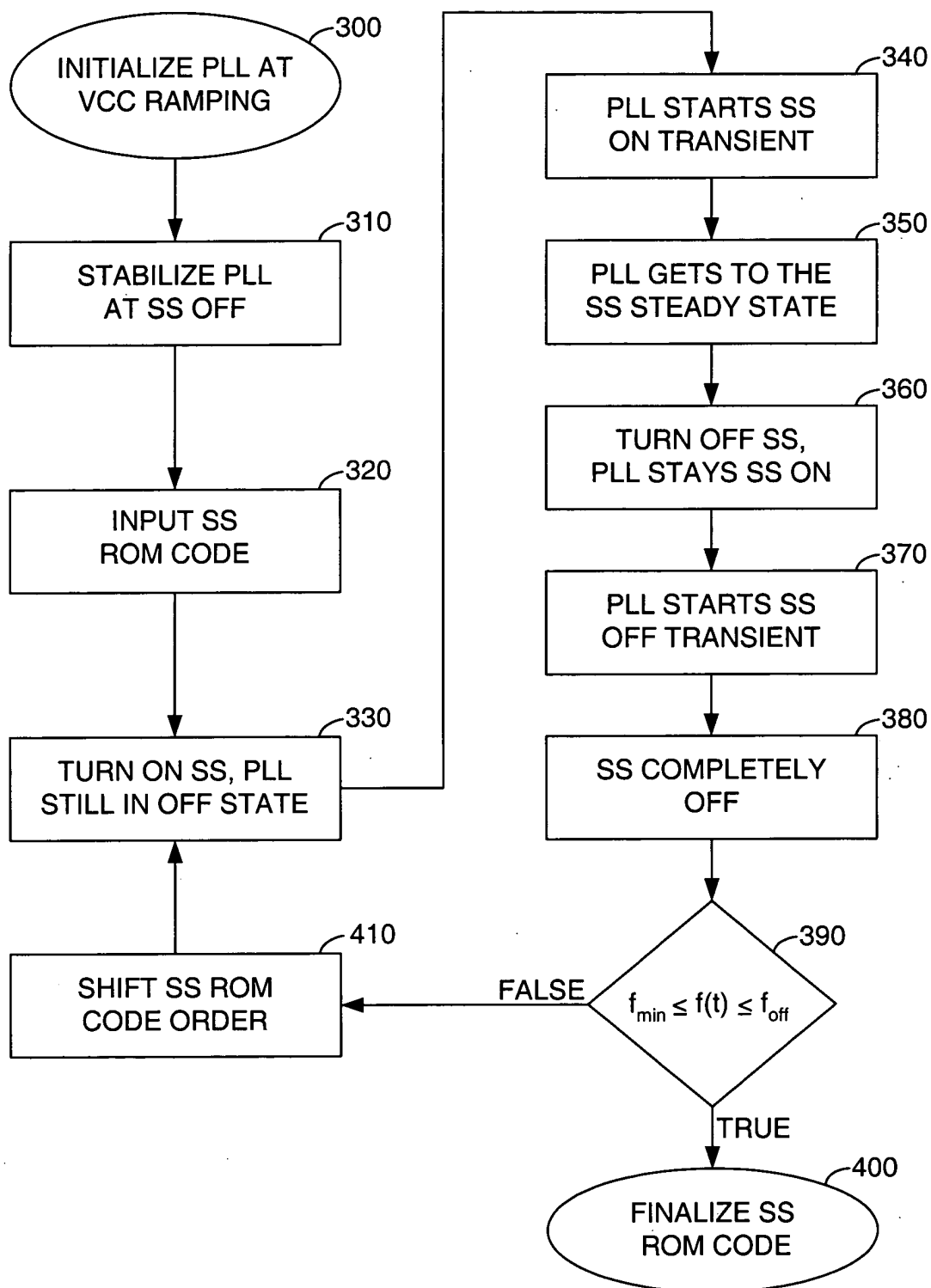
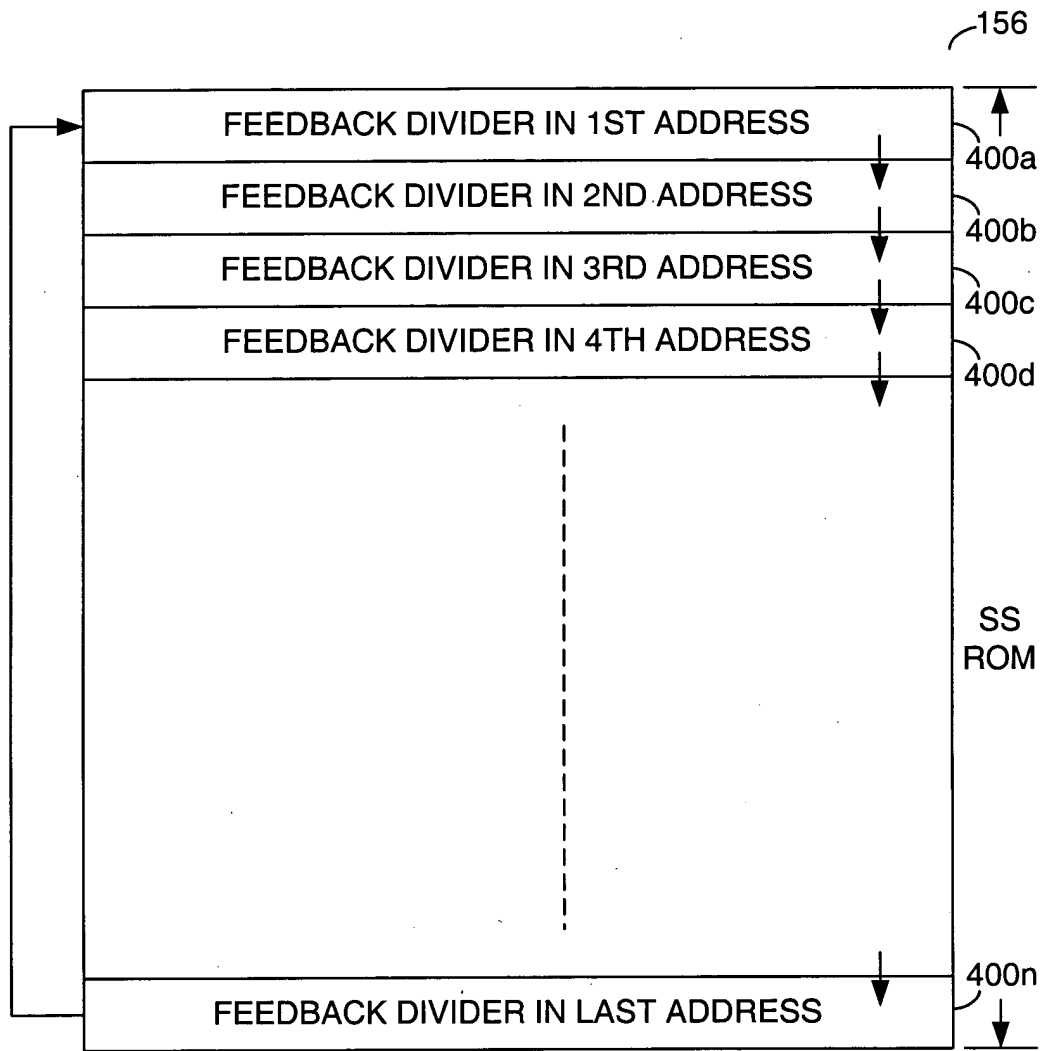


FIG. 8



ORDER SHIFTING STEP IN RESPONSE TO BAD BEHAVIOR



MOVE FEEDBACK DIVIDER IN LAST ADDRESS TO 1ST ADDRESS AND SHIFT DOWN SS ROM CODE.

FIG. 9